

Alaska Department of Fish and Game Commercial Fisheries Management and Development Division Juneau, Alaska Report No. 1J95-26

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### PROPOSAL #1, PAGE #1, 5 AAC 32.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would reduce the commercial Dungeness crab pot limit in Southeast Alaska from 300 to 200 pots.

WHAT ARE THE CURRENT REGULATIONS?: 5 AAC 32.125. (a) In Area A, no more than 300 Dungeness crab pots may be used by a vessel to take Dungeness crab.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The maximum number of pots that could be used by a commercial crabber in Tier A would be 200 pots, in Tier B 150 pots, in Tier C 100 pots, and in Tier D 50 pots. The total number of pots available on the fishing grounds would be 32,200 pots.

**BACKGROUND:** A 300 pot limit has been in effect since the 1960's. This was not a problem until the early 1980's, when the number of participants and pots fished rapidly increased. Gear set by 200 to 300 participants fully saturates available fishing grounds.

## **Major Concerns**

- The highest effort occurs each summer when males molt and fill with meat, and females begin molting and mating. During the intense summer fishery, crabs are vulnerable to handling mortality and sublethal damage. This negatively impacts future stock conditions, and does not maximize stock utilization.
- Gear saturation on the fishing grounds discourages movement of gear off soft shell or unmarketable crab. It is economically viable to sort through, and damage, soft or unmarketable crab to retain one or two legal, hard-shelled crabs per pot lift. Handling mortalities on soft and light crab range between 4 and 54 percent.
- Aerial overflights in 1992 indicated 27,000 or more pots were set during the summer fishery in northern Southeast Alaska inside waters. These waters produce about 85% of the total seasonal catch.
- The CFEC recently limited the fishery using a tiered pot system. The number of participants for future fisheries is estimated to be between 308 and 360 individuals. Experience in other fisheries shows that real fishing effort increases with time until the maximum fishing capacity is reached. With 308 individuals and the tiered system approximately 48,000 pots could eventually be fished.
- An intense summer fishery removes the major portion of larger, legal male crab prior to
  molting and mating of females. A high pot limit will exacerbate the intensity of the summer
  fishery. This may have a negative impact on stock reproduction and future health of the
  resource.

**DEPARTMENT COMMENTS:** Under the CFEC tiered limited entry system, a 200 pot limit would result in a maximum of 32,200 pots which is close to the current total effort level. Because current fishing effort appears capable of fully utilizing the available harvestable surplus of dungeness crab, the department supports a reduction in the pot limit to a maximum of 200 pots per vessel.

PROPOSAL #2, PAGE #1, 5 AAC 77.664. PERSONAL USE KING CRAB FISHERY and 5 AAC 34.150. CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: This proposal was submitted by the department at the request of the Board to allow consideration of various management options for the personal use and commercial fishery harvest of red king crab in southeast Alaska.

WHAT ARE THE CURRENT REGULATIONS?: The harvest of red king crab in Southeast Alaska is managed in accordance with the Board's "Policy on King and Tanner Crab Resource Management" and the "Southeast Alaska Red King Crab Management Plan" (5 AAC 34.113). Specific commercial fishery management measures include an annual guideline harvest level based on a conservative harvest rate, a minimum economic threshold level of 300,000 pounds, a 20 pot limit per vessel, a season beginning November 1, and harvest of only male crab greater than seven inches in carapace width. For personal use fisheries there is a five pot per person and ten pot per vessel limit, a daily bag and possession limit of six crab, a season running from July 1 through March 31, and harvest of only male crab greater than seven inches. In response to concerns over rapidly increasing personal use effort and harvest, in 1995 the Board adopted a limit of four pots per vessel and a three crab daily bag and possession limit specifically for the Juneau area (Sections 11-A, 15-C, and 12-B).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The Board directed the department to submit this general proposal to allow for consideration and public comment on a variety of possible management options for the commercial and personal use fisheries. The effect of this proposal will depend on the specific actions taken by the Board.

BACKGROUND: In 1993, the department submitted an agenda change request to the board concerning management of the personal use red king crab fishery in Southeast Alaska. The purpose of the department's agenda change request was to obtain input from the board and from the public on options for addressing the increasing allocation conflicts between commercial and personal use king crab fisheries in southeast Alaska. After hearing public testimony, the board decided to take no action on the department's agenda change request and instead issued another call for proposals that were eventually considered in March 1995 in Anchorage. The board's call for proposals was specifically limited to only the Juneau area personal use king crab fishery. The Board received a total of 17 proposals for consideration at the March 1995 meeting. The only actions taken by the Board were to reduce the daily bag and possession limit for the Juneau area to three crab per day and to reduce the pot limit to four pots per vessel.

In 1995, the department modified the existing stock assessment survey to conduct additional intensive sampling in the area around Juneau (Section 11-A) where the majority of the personal use harvest of red king crab has occurred, prior to the opening of the personal use king crab fishing season on July 1. This additional sampling provided an estimate of the harvestable surplus available in Section 11-A (Figure 1). The department monitors the personal use king crab harvest through the existing creel survey program conducted by the Division of Sport Fisheries during the summer fishing season. If the personal use harvest reaches the allowable harvest level, the personal use fishery is closed for the remainder of the season. Under the existing regulations and stock

levels (i.e., status quo), it is likely that most or all of the allowable harvest level will be usually be taken by the personal use fishery sometime between mid-September and the end of October. When this happens, no commercial fishery will occur or fishing will be limited in the central portion Section 11-A where the personal use fishery primarily occurs. The closure of the central portion of Section 11-A would not necessarily preclude a commercial fishery because the commercial quota could be taken in other areas of the region. However, it is likely that there would be no additional harvest allowed during the winter and following spring portion of the personal use season when a smaller number of king crab are normally taken by scuba divers and a limited number of pot fishermen.

**DEPARTMENT COMMENTS:** The department's existing stock assessment and management approach should be sufficient to conserve red king crab stocks. However, the issues of allocation of red king crab stocks between the commercial and personal use user groups, particularly in the Juneau area, and between the different gear groups within the personal use fishery, i.e. the winter and spring pot and dive fisheries still need to be addressed by the Board.

The department will be ready to provide the board with an evaluation of the effects of specific management options or allocation guidelines that they may wish to consider at the October meeting.

# PROPOSAL #3, PAGE #2, 5 AAC 34.080. HARVEST STRATEGY.

WHAT WOULD THE PROPOSAL DO?: This proposal would direct the department to manage the commercial fishery in Southeast Alaska in a manner that guarantees a personal use and sport harvest will remain available.

WHAT ARE THE CURRENT REGULATIONS?: Auke Bay and Gastineau Channel are closed by regulation to the commercial red king crab fishery. The commercial fishery is opened on November 1 when at least 300,000 pounds of legal male red king crab are available for harvest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Based on the wording of the proposal, the department assumes that the intent is to establish a sport fishery and to assign priority for sport and personal use. The effect would be to formalize a system for all of Southeast Alaska that now gives priority to personal users by default, and possibly to further restrict commercial harvests.

#### **BACKGROUND:**

- During the past decade, the personal use king crab fishery has grown. In the Juneau area, the
  personal use fishery currently catches a substantial amount of the total allowable catch each
  year.
- During the past two commercial openings, the department closed the northern half of Section 11-A to commercial fishing because the personal use catch approached what was felt to be the allowable harvest from the closed area. The intent of these closures was to prevent excessive harvest of red king crab from this heavily used personal use fishing area.

- It is not possible to guarantee harvests, as king crab stocks are regulated in part by environmental effects.
- Apportionment and allocation of available king crab harvests to personal use and commercial
  fisheries is currently by default. Personal use harvests occur first, and in the Juneau area,
  commercial harvests take what remains of the total allowable catch. If the Board feels it is
  appropriate to allocate the resource in a more formal manner, the department will do its best
  to meet the Board's objectives.

# PROPOSAL #4, PAGE #2, 5 AAC 34.113. SOUTHEAST ALASKA RED KING CRAB MANAGEMENT PLAN.

WHAT WOULD THE PROPOSAL DO?: This proposal would restrict commercial king crab fisheries in the Juneau Area in a manner to insure that the personal use take will not be reduced below 80% of the 1992-95 average or legal king crab abundance in each area will not be reduced below 75% of the estimated level that would be attained under unfished conditions.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations provide for a commercial fishery if the department's estimate of the harvestable surplus is at least 300,000 pounds of legal male red king crab.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: This proposal would be difficult to adopt as stated; however, an allocation of this level would most likely result in closure of the commercial fishery in the Juneau area.

#### **BACKGROUND:**

- The department currently uses modifications of guidelines developed in the past 5 years for management of red king crab fisheries around Kodiak and the Bering Sea. In most aspects, guidelines applied in Southeast Alaska are more conservative than those applied in other areas.
- The harvest rate for legals is based on a targeted rate of 20% of mature males. King crab become mature before they recruit to legal size, so that the legal crab population is a portion of the mature male population. Therefore, the allowable harvest of legals depends not only on the number of legal crabs, but also on the mature pre-recruit crabs. This is a conservative method to protect reproductive viability.

- Although it is possible to estimate an average personal use success rate for 1992-95, it is not
  possible to reliably estimate the size of the unfished population. Crab populations, fished or
  not fished, are expected to undergo large annual variations. The proposal would require
  modification before it is practical to implement.
- The personal use harvest of crab in the Juneau area now exceeds 25% of the legal male population. Although it is not clear what the unfished population size would be in relation to the current population size, it is likely that the high personal use catches of the recent 4 years would exceed conservative limits of the magnitude set out in the proposal, such that the catch would be allocated in full to personal use.
- Starting in the summer of 1995, the department included the major Juneau personal use fishing areas in its survey schedule. As a result, it will be able to provide estimates of abundance for the Juneau area and to manage both personal use and commercial fisheries in this area using its standard harvest rate assumptions. It will be a more flexible system than that being proposed because it accounts for natural variability in abundance.

# PROPOSAL #5, PAGE #3, 5 AAC 34.113. SOUTHEAST ALASKA RED KING CRAB MANAGEMENT PLAN.

WHAT WOULD THE PROPOSAL DO?: This proposal would require standardized pots, bait, soak times, and 100% observer coverage in the Juneau area. Observer data and survey data would be combined and applied to abundance based quotas for commercial fishing.

WHAT ARE THE CURRENT REGULATIONS?: King crab gear is currently defined by tunnel eye dimensions and maximum size. There are no standards or regulations stipulating soak times or bait. There is no requirement for voluntary or mandatory observers aboard king crab fishing vessels in Southeast Alaska.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Vessel operators would be required to comply with standardized pots, bait, soak times, and mandatory observer coverage in the Juneau area. There would be a strong economic disincentive to fish commercially in the Juneau area.
- The department would be required to integrate observer data and other survey data in developing abundance based quotas for the commercial fishery in the Juneau area.

#### **BACKGROUND:**

- The department has a stock assessment program that provides estimates of abundance in the Juneau area and in other areas of Southeast Alaska. This program relies on a standardized survey method, which is more reliable for assessment purposes, and more cost-effective to implement than the proposed regulations for commercial fishing.
- Although observer coverage is required in other parts of Alaska for factory vessels or catchers processing their own catch, there is no requirement in Southeast Alaska for observers on vessels which catch and then sell to floating or shore-based processors.
- King crab pot definitions were intended to separate king crab pots from other types of pot gear for enforcement purposes.
- Type of bait and soak time are typically not aspects of a commercial crab fishery regulated by the department.

- The department does not support the proposal because it calls for costly and largely unnecessary measures.
- The department feels that the current assessment program, enlarged for the Juneau area in 1995, will provide adequate information on stock abundance and stock composition, and addresses the concerns of the proposal.
- The logbook and port sampling programs provide catch rate, location, distribution, soak time, pot type, and crab size frequency information. Limited aerial and on-water surveys are used to cross-check data and obtain catch information from the fleet.

PROPOSAL #6, PAGE #4, 5 AAC 34.113. SOUTHEAST ALASKA RED KING CRAB MANAGEMENT PLAN. and 5 AAC 77.664. PERSONAL USE KING CRAB FISHERY.

WHAT WOULD THE PROPOSAL DO?: This proposal would allocate 55% of all harvestable red king crab to personal use fishermen.

WHAT ARE THE CURRENT REGULATIONS?: There are no regulations allocating catch to commercial or personal use crabbers. There are no allocations for subsistence or sport crabbers because there is no traditional use findings for red king crab and the sport limit for red king crabs is zero.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Personal use crabbers would be allocated 55% of the harvestable red king crab.

**BACKGROUND:** There are no formal allocations of red king crab to either commercial or personal use crabbers and no prior precedents in crab fisheries in Southeast Alaska.

**DEPARTMENT COMMENTS:** The intended geographic scope of this proposal is not clear. The proposal is allocative and the department maintains a neutral position.

# PROPOSALS #7, 8, PAGE #4, 5 AAC 34.150. AREA A CLOSED WATERS.

**WHAT WOULD THE PROPOSAL DO?:** These proposals would close Sections 11-A, 12-B, and 15-C to commercial red king crabbing while leaving it open to personal use fishing.

#### WHAT ARE THE CURRENT REGULATIONS?:

- Current regulations permit commercial fishing in these sections during the commercial season, with the exception of closed areas in Auke Bay and Gastineau Channel and additional areas closed by emergency order in the northern half of Section 11-A.
- In Sections 11-A, 12-B, and 15-C, the personal use king crab fishery is limited to a daily bag limit and possession limit of three crab and a pot limit of four pots per person and boat.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED:

- Commercial fishing for red king crab would be prohibited in these sections from which about 20% (about 60,000 lbs average) of the total Southeast Alaska commercial catch for each of the past two seasons and 75% (about 47,000 lbs average) of the total Southeast Alaska personal use catch over the past four years was reported.
- The Juneau-based commercial crabbing fleet will be forced to use alternate fishing grounds further from home port, in areas such as Seymour Canal and Glacier Bay.
- The personal use pot and dive fisheries would have exclusive access to harvestable red king crab in these sections.

# **BACKGROUND:**

- Over the past decade, the personal use king crab fishery in the Juneau area has grown and currently catches most of the total available harvest each year.
- During the past two commercial openings, the department has closed the northern half of Section 11-A to commercial fishing because the personal use catch approached what was felt to be the allowable harvest from the closed area. The intent of these closures was to prevent excessive harvest of red king crab from this heavily used personal use fishing area.
- In March 1995, the Board adopted the current, reduced personal use bag limit and pot limits for king crab in the Juneau area. The intent was to slow the catch rates in Sections 11-A, 12-B, and 15-C to provide for continued harvest through the entire personal use harvest period from July 1 through March 31, without the need to close the area to prevent overharvest of the local crab stock by the personal use fishery.
- The personal use and commercial fisheries are direct competitors in some portions of these sections near Juneau but there are productive areas in 12-B and 15-C which are not yet heavily fished by the personal use fleet.

**DEPARTMENT COMMENTS:** The department remains neutral on these allocative proposals.

# PROPOSALS: 7 THROUGH 16

Table 1. Section 11-A, 12-B, and 15-C red king crab harvest in pounds and number of crab, number of landings, and number of permits by season, 1976/77 season to present.

Season	Catch	Number of Crab <sup>a</sup>	Landings	Permits
1976/77	90,527	10,600	29	9
1977/78	40,488	5,464	14	5
1978/79	70,597	9,929	40	13
1979/80	81,177	11,197	79	13
1980/81	117,613	16,358	60	11
1981/82	96,620	13,364	46	14
1982/83	81,855	10,856	31	16
1983/84	32,849	4,525	30	19
1984/85	33,731	4,462	37	18
	Comme	rcial Red King Crab	Closed	
1993/94	62,111	7,678	80	32
1994/95	58,722	7,214	106	38

Number of crab estimated by dividing harvest in pounds by average weight per crab by season. Average weight for season is from dockside sampling data.

<sup>\*</sup> When number of permits is less than three, information is confidential.

Table 2. Section 11-A red king crab harvest in pounds and number of crab, number of landings, and number of permits by season, 1976/77 season to present.

Season	Catch	Number of Crab <sup>a</sup>	Landings	Permits
1976/77	54,312	6,360	19	. 6
1977/78	23,788	3,210	11	5
1978/79	46,951	6,604	33	9
1979/80	50,131	6,915	70	9
1980/81	78,536	10,923	48	10
1981/82	62,135	8,594	32	12
1982/83	16,337	2,167	16	7
1983/84	14,975	2,063	16	9
1984/85	28,837	3,814	34	16
	Comme	ercial Red King Cral	Closed	
1993/94	27,660	3,419	48	19
1994/95	42,278	5,194	93	31

Number of crab estimated by dividing harvest in pounds by average weight per crab by season. Average weight for season is from dockside sampling data.

<sup>\*</sup> When number of permits is less than three, information is confidential.

Table 3. Section 12-B (District 112-61, 63, and portions of 112-15 and 112-16) red king crab harvest in pounds and number of crab, number of landings, and number of permits by season, 1976/77 season to present.

Season	Catch	Number of Crab <sup>a</sup>	Landings	Permits
1976/77	*	*	*	*
1977/78	0			
1978/79	*	*	*	*
1979/80	20,696	2,855	7	5
1980/81	*	*	*	*
1981/82	0			
1982/83	47,433	6,291	10	8
1983/84	17,410	2,398	12	11
1984/85	*	*	*	*
	Comme	ercial Red King Crab	Closed	
1993/94	17,135	2,118	23	16
1994/95	11,515	1,415	15	11

Number of crab estimated by dividing harvest in pounds by average weight per crab by season. Average weight for season is from dockside sampling data.

<sup>\*</sup> When number of permits is less than three, information is confidential.

Table 4. District 111-40 and 41, Backside of Douglas and Youngs Bay, red king crab harvest in pounds and number of crab, number of landings, and number of permits by season, 1976/77 season to present.

Season	Catch	Number of Crab <sup>a</sup>	Landings	Permits
1976/77	12,999	1,522	9	4
1977/78	*	*	*	*
1978/79	30,711	4,319	9	4
1979/80	0			
1980/81	14,241	1,981	10	3
1981/82	*	*	*	*
1982/83	10,144	1,345	11	4
1983/84	7,922	1,091	9	6
1984/85	14,856	1,965	21	11
	Comm	ercial Red King Cral	b Closed	
1993/94	25,258	3,122	39	12
1994/95	27,984	3,438	72	24

Number of crab estimated by dividing harvest in pounds by average weight per crab by season. Average weight for season is from dockside sampling data.

<sup>\*</sup> When number of permits is less than three, information is confidential.

Table 5. District 111-50, Auke Bay, red king crab harvest in pounds and number of crab, number of landings, and number of permits by season, 1976/77 season to present.

Season	Catch	Number of Crab <sup>a</sup>	Landings	Permits
1976/77	41,313	4,838	10	. 5
1977/78	17,712	2,390	8	4
1978/79	16,240	2,284	25	7
1979/80	50,131	6,915	70	9
1980/81	64,295	8,942	38	10
1981/82	57,710	7,982	31	12
1982/83	6,193	821	5	5
1983/84	7,053	971	7	4
1984/85	13,981	1,849	13	10
	Comm	ercial Red King Cral	o Closed	
1993/94	2,402	297	13	10
1994/95	14,294	1,756	27	11

Number of crab estimated by dividing harvest in pounds by average weight per crab by season. Average weight for season is from dockside sampling data.

<sup>\*</sup> When number of permits is less than three, information is confidential.

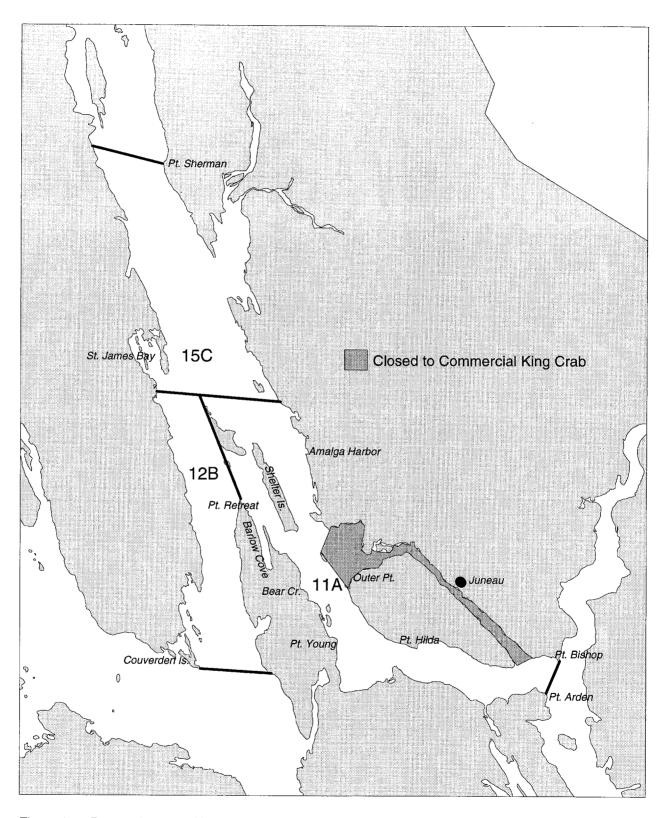


Figure 1. Proposals 7-16. Close commercial red king crab to commercial fishing.

## PROPOSALS #9-13, PAGES #5-7, 5 AAC 34.150. AREA A CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: These proposals would close Section 11-A to commercial harvest of red king crab.

WHAT ARE THE CURRENT REGULATIONS?: Auke Bay and Gastineau Channel are closed by regulation to the commercial red king crab fishery. An area adjacent to the Auke Bay closed waters in the northern half of Section 11-A has been closed to commercial red king crab fishing by emergency order during the past two commercial red king crab seasons.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- The commercial red king crab fishery will be closed in all of Section 11-A.
- Smaller commercial vessels historically dependent on protected waters close to town would be forced to move to more distant fishing grounds.
- Absence of a commercial fishery will allocate the entire allowable catch from Section 11-A to the personal use fishery. This will benefit the personal use fishery, particularly personal use divers, by improving prospects for openings into late winter when crabs enter shallow waters and become more accessible to divers.

#### **BACKGROUND:**

- Over the past decade, the personal use king crab fishery in the Juneau area has grown and currently catches most of the total allowable catch each year.
- During the past two commercial openings, the department has closed the northern half of Section 11-A to commercial fishing because the personal use catch approached what was felt to be the allowable harvest from the closed area. The intent of these closures was to prevent excessive harvest of red king crab from this heavily used personal use fishing area.
- The areas open to commercial fishing in Section 11-A accounted for an average of 35,000 lbs during the past two seasons (about 15% of the average commercial Southeast Alaska catch for the commercial fishery).
- The personal use fishery harvest in Section 11-A during the past four seasons has ranged from about 35,000 to 67,000 lbs (creel survey). The Juneau area harvest, most of which was caught in Section 11-A, accounted for between 72% and 85% of the total Southeast Alaska personal use catch (postal surveys; data are from Suchanek, 1995, "The Personal Use King Crab Fishery in Southeast Alaska").

**DEPARTMENT COMMENTS:** These are allocative proposals that seeks to formalize conservation closures implemented by emergency order for the past two commercial king crab seasons and to extend the areas closed to commercial red king crabbing. The department can provide for continued viability of the resource with existing regulations and assessment programs. The department maintains a neutral position on these allocative proposals.

## PROPOSALS #14, 15, PAGE #7, 5 AAC 34.150. AREA A CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: These proposals would formalize the emergency order closures of an area in northern Section 11-A to the commercial king crab fishery for the past two commercial king crab seasons. In addition to the area closed by emergency order, Proposal 14 requests a closed area between the southern boundary of the emergency order closures and a line from Point Hilda to Point Young and Proposal 15 requests a closed area between the southern boundary and a line from Point Hilda to Bear Creek.

WHAT ARE THE CURRENT REGULATIONS?: Auke Bay and Gastineau Channel are closed by regulation to the commercial red king crab fishery. An area adjacent to the Auke Bay closed waters in the northern half of Section 11-A has been closed to commercial red king crab fishing by emergency order during the past two commercial red king crab seasons.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The area which has been closed to commercial king crabbing for the past two seasons by emergency order will be formalized in regulation and extended south to include an area between the latitude of Outer Point and a line from Point Hilda to Point Young or a line from Point Hilda to Bear Creek.

#### **BACKGROUND:**

- Over the past decade, the personal use king crab fishery in the Juneau area has grown and currently catches a substantial amount of the total allowable catch each year.
- During the past two commercial openings, the department has closed the northern half of Section 11-A to commercial fishing because the personal use catch approached what was felt to be the allowable harvest from the closed area. The intent of these closures was to prevent excessive harvest of red king crab from this heavily used personal use fishing area.
- The closed waters approximated the areas most heavily fished by the personal use pot and dive fisheries, including most of the Portland trench, which trends southeast to northwest off the west shore of Portland Island.
- The Portland trench extends beyond the area closed to the commercial fishery. There is some concern that king crab migrate between the closed area and the open area, becoming susceptible to the commercial fishery after being subject to heavy personal use pressure earlier in the season.

- The department is neutral on these proposals.
- The department has initiated a tagging program for this general area which should, over time, provide information on movement of crabs within northern Section 11-A. It will take several years to determine movement patterns and to determine the effectiveness of the closure lines for the apportionment of catch and conservation of the crabs in this area.

#### PROPOSAL #16, PAGE #8, 5 AAC 34.150. AREA A CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: This proposal would formalize emergency order closures of Barlow Cove to commercial red king crab fishing that were in effect during the past two commercial openings.

**WHAT ARE THE CURRENT REGULATIONS?:** Current regulations do not close Barlow Cove to commercial red king crab harvest.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Barlow Cove would be closed by regulation to commercial red king crab fishing.
- Closure to commercial fishing would increase the chances that the personal use fishery would remain open through more of the July 1 through March 31 season.
- Having the personal use season remain open into January, February, and March permits use
  of this resource by divers in late winter when red king crab begin aggregating in inshore
  waters shallower than 60 to 80 feet. They are usually dispersed in deeper water from July
  through December and inaccessible to divers.

#### **BACKGROUND:**

- Barlow Cove is consistently one of the most productive areas for red king crab in Southeast Alaska. It is a relatively small, confined, isolated inlet on the northernmost tip of Admiralty Island.
- Creel survey data indicates that the personal use harvest of red king in the Barlow Cove area ranges from 5% to 12% of the total Juneau area personal use king crab harvest. Barlow Cove is one of the most popular local crabbing areas for late winter divers.
- Before the commercial red king crab fishery was reopened on November 1, 1993, after a nine-year closure, Barlow Cove, as well as other areas in upper Section 11-A was closed by emergency order. The summer personal use fishery had already taken a significant part of the total available harvest. The closure was based on a conservation concern.
- Barlow Cove has been closed to commercial red king crab fishing for the past two seasons by emergency order.

- The department is neutral on this largely allocative proposal.
- Barlow Cove is a small portion of the area being requested by numerous proposals for commercial closure. Its closure should be discussed in the larger context of a comprehensive management and allocation plan for the Juneau area as a whole.
- The department will continue conservation closures around the Juneau area unless action by the Board alleviates this concern.

# PROPOSAL #17, PAGE #26, 5 AAC 34.150. AREA A CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: This proposal would close the waters of Taiya Inlet north of the latitude of Taiya Point to commercial red king crab fishing.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit commercial red king crab fishing in Taiya Inlet during the general opening in Southeast Alaska.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Commercial red king crabbers would no longer be permitted to crab in Taiya Inlet.

#### **BACKGROUND:**

- Commercial red king crabbing has occurred in Taiya Inlet since the beginning of this fishery in Southeast Alaska.
- The smallest catch reporting subdistrict for this general area is 115-34, which includes waters of Lynn Canal north of the latitude of Seduction Point, as well as Taiya Inlet. Taiya Inlet comprises less than half of the total area in 115-34.
- The commercial catch reported from 115-34 probably originates predominately from waters outside Taiya Inlet, since suitable habitat in the inlet is much more limited than further south in the subdistrict.
- Commercial effort and catch from this area declined from the early 1980s through the mid-1980s, after which the fishery was closed for nine seasons. Although the fishery has been open for the past two seasons, there has been no commercial harvest recorded from this area since the 1983/84 season.
- The department has no means of determining the abundance of red king crab in this area.

**DEPARTMENT COMMENTS:** The department is neutral on this primarily allocative proposal.

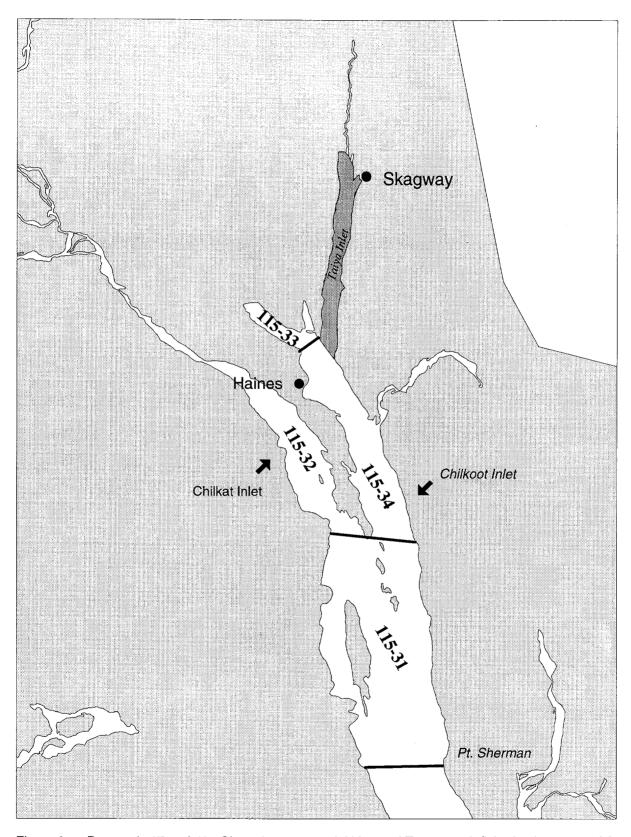


Figure 2. Proposals 17 and 49. Close the commercial king and Tanner crab fisheries in waters of Section 15A of Tiaya Inlet.

## PROPOSAL #18, PAGE #9, 5 AAC 5 AAC 34.150. CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: This proposal would close all areas within five miles of a public road to commercial crab fishing.

WHAT ARE THE CURRENT REGULATIONS?: The only areas closed by regulation to the commercial crab fishery in Southeast Alaska are Auke Bay and Gastineau Channel around Juneau. The department implemented additional commercial closures by emergency order for a high personal use area adjacent to the regulatory closed waters in Auke Bay.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The commercial king crab fishery will be closed within an as-yet unquantified number of areas within five miles of a public road in Southeast Alaska.

#### **BACKGROUND:**

• There are precedents for regulations keyed to distances from communities. For example, preseason gear storage is permitted for the commercial king and Tanner crab fisheries within ten miles of a community. The regulation is interpreted to mean within a radius of 10 nautical miles from the nearest U.S. Postal Service office.

- The department is neutral on this allocative proposal.
- If a regulation is adopted specifying public road systems, it will be considerably more difficult to establish exclusion areas. At this point, it is not possible to evaluate how extensive these areas might be, where they might be located, and what their effect might be.

PROPOSAL #19, PAGE #9, 5 AAC 34.150. AREA A CLOSED WATERS. and 5 AAC 77.664. PERSONAL USE KING CRAB FISHERY.

**WHAT WOULD THE PROPOSAL DO?:** This proposal would close waters of Section 13-C (Peril Strait), and portions of Sections 13-A and 13-B in the immediate proximity of Sitka to the commercial king crab fishery. The area would be managed exclusively for personal use.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations allow for commercial fisheries as well as personal use fishing in this area.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- There would be no commercial red crab fishery in the designated area.
- Commercial crabbers who fished in the area will be displaced to other fishing grounds.
- Personal use crabbers will have exclusive access to the total allowable harvest, as determined by the department's summer stock assessment survey.

#### **BACKGROUND:**

- The department conducts surveys of the Deadman Reach area of Peril Strait each summer as part of its red king crab assessment survey. The survey area encompasses the most productive grounds for historical commercial harvest within Peril Strait. The department assumes that the results from this small area in Peril Strait reflect the relative overall condition of all Peril Strait stocks.
- The best data available to the department indicates that the stocks in Peril Strait most important to the commercial fishery (and presumed to also be important to the personal use fishery) have rebuilt from low levels in the mid-1980s. Recent surveys occurred after the start of the personal use season in many years, do not account for up to a month's prior harvest of personal use crab, and are a conservative estimate of actual stock abundance.
- Results from the past three years indicate that the population of legal male king crab is at or near the historical high level in the Deadman Reach area. The commercial catch, which has averaged 22,000 pounds in the past two seasons, is only one-third to one-fifth the historical high catch.
- It is possible that other, unsurveyed local bay stocks in Peril Strait are experiencing declines in abundance.
- The total personal use harvest of king crab in the entire Sitka area averaged 1,694 crab or 15% of the total Southeast Alaska personal use harvest from 1992 to 1994 (Statewide Postal Harvest Survey).

#### **DEPARTMENT COMMENTS:**

• The department is neutral on this allocative proposal.

# **PROPOSAL 19**

Table 6. Section 13-C (District 113-51 through District 113-59). Red king crab harvest in pounds and number of crab, number of landings, and number of permits by season, 1976/77 season to present.

Season	Catch	Number of Crab <sup>a</sup>	Landings	Permits
1976/77	*	*	*	*
1977/78	68,844	9,291	29	3
1978/79	78,112	10,986	28	6
1979/80	79,434	10,956	18	4
1980/81	73,067	10,162	27	5
1981/82	116,707	16,142	24	8
1982/83	70,823	9,393	22	9
1983/84	46,747	6,439	17	14
1984/85	51,817	6,854	13	12
	Comm	ercial Red King Cral	o Closed	
1993/94	22,642	2,799	20	20
1994/95	21,366	2,625	19	10

Number of crab estimated by dividing harvest in pounds by average weight per crab by season. Average weight for season is from dockside sampling data

<sup>\*</sup> When number of permits is less than three, information is confidential.

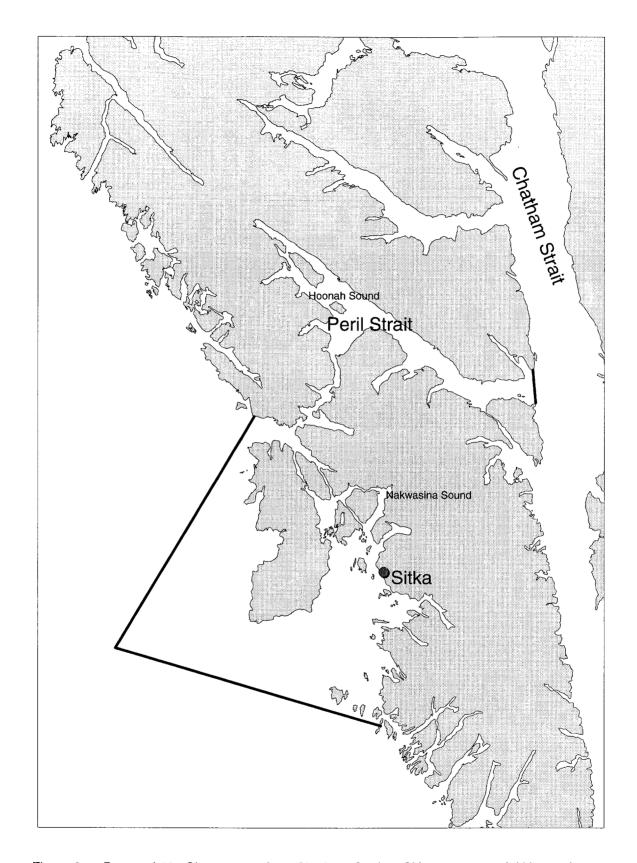


Figure 3. Proposal 19. Close waters from Chatham Strait to Sitka to commercial king crab.

#### PROPOSAL #20, PAGE #10, 5 AAC 34.150. AREA A CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: This proposal would close an area of Tenakee Inlet in the vicinity of the community of Tenakee Springs to the commercial red king crab fishery and establish an exclusive personal use fishery.

#### WHAT ARE THE CURRENT REGULATIONS?:

• Current regulations permit a commercial fishery in this area when the commercial season is opened in Southeast Alaska.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- The three or four commercial crabbers fishing in subdistricts 112-42 and 112-43 reported catching an average of 2,625 lbs per season during the past two seasons. Subdistricts 112-42 and 112-43 represent a slightly larger area than that being requested for commercial closure. These vessels would be displaced to other fishing grounds, both elsewhere and in Tenakee Inlet, if the proposed area is designated an exclusive personal use area.
- The area would be managed exclusively for personal use king crabbing.

#### **BACKGROUND:**

- The department does not include Tenakee Inlet in its summer stock assessment survey for red king crab because it has never been a historically productive area for the commercial fishery. As a result, the department does not have an abundance estimate for red king crab in the inlet and cannot determine the percentage of legal crabs taken by the personal use fishery.
- The department also does not have a creel census program specific to Tenakee Inlet or residents of Tenakee Springs and cannot estimate the personal use harvest or its affect on the abundance of red king crabs in this area.

#### **DEPARTMENT COMMENTS:**

• The department is neutral on this allocative proposal.

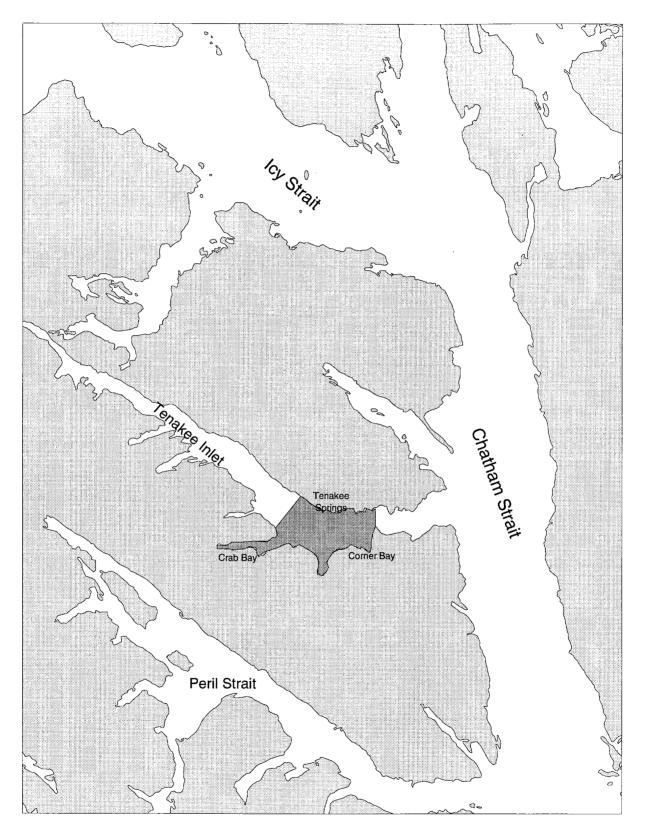


Figure 4. Proposal 20. Close waters of Tenakee Inlet to commercial red king crab.

### PROPOSAL #21, PAGE #10, 5 AAC 34.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, will establish a 20 pot limit for commercial red king crab fishing throughout Statistical Area A. It provides for pot limits when concurrent red king crab, brown king crab, or Tanner crab fisheries occur.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations specify a 20 pot limit for red king crab fishing in inside waters of Statistical Area A if the guideline harvest level is between 300,000 and 400,000 pounds, and a 100 pot limit if the guideline harvest level is above 400,000 pounds. Current regulations define a 100 pot limit for brown king and Tanner crab fishing. There is no pot limit for outside waters.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The maximum number of pots used by a commercial crabber would be 20 pots whenever a red king crab season is open, would be 100 king crab pots when only the brown king crab season is open, and would be 100 king and Tanner crab pots when brown king and Tanner crab seasons are concurrently open. The proposal would extend the pot limits to outside waters of Statistical Area A.

**BACKGROUND:** The initial gear limit of 40 pots per vessel was established in 1968, and increased to 100 pots by 1978. The limit remained at 100 pots until 1988 for red king crab. The limit was reduced to 40 pots in 1988 in anticipation of future fishing if stock conditions continued to improve. By 1993 it was apparent that sufficient crab would be available to support a commercial season, but over 100 vessels remained eligible to fish under the limited entry system adopted in 1985. The department proposed a reduction to 20 pots in 1993 to support a more conservative harvest rate based management plan, which was placed in regulation in 1994. The limit is 100 pots for brown king crab.

#### **Major Concerns**

- It is doubtful that stocks will be strong enough to support a red king crab fishery with 100 pots per vessel, given the number of permits available and the conservative management plan utilized today.
- Under existing regulations there is no king crab pot limit outside the surfline.
- The red king crab fishery is not held concurrently with any other king or Tanner crab fishery. Bitter crab disease is a problem in the Tanner crab fishery and a potential solution is an concurrent early season opening (October or November) or a concurrent November season. If concurrent fisheries develop, the pot limit should be that of the species requiring the greatest degree of conservation.

**DEPARTMENT COMMENTS:** The department supports the elimination of different pot limits based on the quantity of red king crab available to harvest. A return to 100 pots per vessel for stock conditions with a harvestable surplus above 400,000 pounds would result in a fishery which does not follows the present management plan. The department has submitted companion proposals for the Tanner crab fishery, and to define escape mechanisms for king and Tanner crab pots.

## PROPOSAL #22, PAGE #12, 5 AAC 32.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would reduce the legal number of pots per vessel from 20 to 10 pots in the commercial red king crab fishery of Southeast Alaska (Statistical Area A).

WHAT ARE THE CURRENT REGULATIONS?: There is a 20 pot limit for red king crab in inside waters if the guideline harvest level (GHL) is between 300,000 and 400,000 pounds, and a 100 pot limit if the GHL is above 400,000 pounds. Current regulations define a 100 pot limit for brown king and Tanner crab fishing. There is no pot limit in outside waters.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: A reduction in pots would slow the daily catch rate, thereby lengthening the season.

**BACKGROUND:** A limit of 40 pots per vessel was established in 1968, and increased to 100 pots by 1978. The limit was reduced to 40 pots in 1988 when stocks were depressed. By 1993 stocks had improved enough to support a commercial season, but over 100 vessels remained eligible to fish under the limited entry system adopted in 1985. The department proposed a reduction to 20 pots in 1993 as part of a more conservative management plan based on a harvest rate approach. This plan was placed in regulation in 1994.

# **Major Concerns**

- The commercial fishery is managed under a conservative management plan based on a harvest rate strategy. A pot limit of 20 is sufficiently conservative to meet the goals of the management plan.
- The harvestable surplus available to the commercial fishery is determined after adjustments have been made for the personal use harvest in Section 11-A.
- This gear reduction may slow the commercial fishery to the point that it would not be economical for fishers to continue to participate.

- This appears to be an allocative proposal to increase personal use fishing opportunities. However, the commercial crab harvest is determined by the GHL and not the pot limit. A reduced pot limit would simply extend the season until the GHL is taken. For this reason, the department does not support the proposal.
- Proposal 21, submitted by the department, would eliminate the provision for a 100 pot limit at higher red king crab abundance levels.

# PROPOSAL #23, PAGE #12, 5 AAC 32.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would reduce the legal number of pots per vessel from 20 to 10 pots in the commercial red king crab fishery of Southeast Alaska (Statistical Area A). Further, it would limit commercial king crab vessels to using 7' x 7' gear.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations specify a 20 pot limit for red king crab fishing inside the surfline if the guideline harvest level is between 300,000 and 400,000 pounds, and a 100 pot limit if the guideline harvest level is above 400,000 pounds. Current regulations define a 100 pot limit for brown king and Tanner crab fishing. There is no pot limit outside the surfline. There is no definition limiting the size or dimensions of commercial crab pots.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: A reduction in pots would slow the daily catch rate, thereby lengthening the season. The gear restriction would result in an increase in pot efficiency for many members of the commercial fleet who now use smaller pots.

**BACKGROUND:** A limit of 40 pots per vessel was established in 1968, and increased to 100 pots by 1978. The limit was reduced to 40 pots in 1988 when stocks were depressed. By 1993 stocks had improved enough to support a commercial season, but over 100 vessels remained eligible to fish under the limited entry system adopted in 1985. The department proposed a reduction to 20 pots in 1993 as part of a more conservative management plan based on a harvest rate approach. This plan was placed in regulation in 1994. There are no restrictions on gear size or dimensions in the commercial fishery.

#### **Major Concerns**

- The commercial fishery is managed under a conservative management plan based on a harvest rate strategy. A pot limit of 20 is sufficiently conservative to meet the goals of the management plan.
- The harvestable surplus available to the commercial fishery is determined after adjustments have been made for the personal use harvest in Section 11-A.
- This gear reduction may slow the commercial fishery to the point that it would not be economical for fishers to continue to participate.
- Mandatory use of 7' x 7' gear would improve the gear efficiency of some members of the fleet, cause safety problems for other members of the fleet, and eliminate other participants due to the relative small size of their vessels.

#### **DEPARTMENT COMMENTS:**

• This appears to be an allocative proposal to increase personal use fishing opportunities. However, the commercial crab harvest is determined by the GHL and not the pot limit. A reduced pot limit would simply extend the season until the GHL is taken. For this reason, the department does not support the proposal.

### PROPOSAL #24, PAGE #12-13, 5 AAC 32.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would reduce the legal number of pots per vessel from 20 to 10 pots in the commercial red king crab fishery of Southeast Alaska (Statistical Area A).

WHAT ARE THE CURRENT REGULATIONS?: There is a 20 pot limit for red king crab in inside waters if the guideline harvest level (GHL) is between 300,000 and 400,000 pounds, and a 100 pot limit if the GHL is above 400,000 pounds. Current regulations define a 100 pot limit for brown king and Tanner crab fishing. There is no pot limit in outside waters.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: A reduction in pots would slow the daily catch rate, thereby lengthening the season.

**BACKGROUND:** A limit of 40 pots per vessel was established in 1968, and increased to 100 pots by 1978. The limit was reduced to 40 pots in 1988 when stocks were depressed. By 1993 stocks had improved enough to support a commercial season, but over 100 vessels remained eligible to fish under the limited entry system adopted in 1985. The department proposed a reduction to 20 pots in 1993 as part of a more conservative management plan based on a harvest rate approach. This plan was placed in regulation in 1994.

# **Major Concerns**

- The commercial fishery is managed under a conservative management plan based on a harvest rate strategy. A pot limit of 20 is sufficiently conservative to meet the goals of the management plan.
- The harvestable surplus available to the commercial fishery is determined after adjustments have been made for the personal use harvest in Section 11-A.
- This gear reduction may slow the commercial fishery to the point that it would not be economical for fishers to continue to participate.

#### **DEPARTMENT COMMENTS:**

• This appears to be an allocative proposal to increase personal use fishing opportunities. However, the commercial crab harvest is determined by the GHL and not the pot limit. A reduced pot limit would simply extend the season until the GHL is taken. For this reason, the department does not support the proposal.

#### PROPOSAL #25, PAGE #13, 5 AAC 34.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would require commercial king crab fishermen to use crab rings pulled by hand during a commercial fishery in Barlow Cove.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit the use of any type of pot which meets the specifications in 34.050 (f) and (g) as long as it is properly marked and properly fished. Currently, ring nets are not legal gear for commercial king crab fishing in Southeast Alaska (Statistical Area A). There are no restrictions on the methods used to retrieve the gear.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Adoption of this proposal would establish a new gear type in the commercial fishery only in Barlow Cove.
- It would change the efficiency of existing commercial gear and fishing techniques in that area.
- It would also allow the development of a new user group that would not fall under the existing limited entry program.

**BACKGROUND:** Early commercial fishing regulations permitted harvest by pots, trawls, ring nets and diving. Trawls were eliminated as legal gear in 1960, diving was eliminated in 1973, ring nets were eliminated in 1990. When a limited entry program was initiated in 1985, ring net fishermen were not included in the program. Thus, although ring nets remained as legal gear until 1990, no permits were issued for ring net gear.

#### **Major Concerns**

- Limiting the commercial fishermen to ring nets pulled by hand could reduce the gear and fishing efficiency to a level where continued commercial fishing in Barlow Cove would not be feasible.
- Allowing a new gear type would require specifications of the gear and operation, and additional capital outlay by the commercial fleet.

## **DEPARTMENT COMMENTS:**

• This proposal is primarily allocative and the department's position is neutral. The proposal appears to be intended to eliminate commercial fishing with traditional gear in Barlow Cove.

# PROPOSAL #26, PAGE #13 and 14, 5 AAC 34.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would require fishermen fishing in all bays and inlets to use crab rings during a commercial king crab fishery.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit the use of any type of pot which meets the specifications in 34.050 (f) and (g), as long as it is properly marked and properly fished. Currently, ring nets are not legal gear for commercial king crab fishing in Southeast Alaska (Statistical Area A).

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Adoption of this proposal would establish a new gear type in the commercial king crab fishery, but only in all bays and inlets of Southeast Alaska (Statistical Area A). Pots would still be fished in straits, sounds and offshore waters.
- It would change the efficiency of existing commercial gear.
- It would also allow the development of a new user group that would not fall under the existing limited entry program.

**BACKGROUND:** Early commercial fishing regulations permitted harvest by pots, trawls, ring nets and diving. Trawls were eliminated as legal gear in 1960, diving was eliminated in 1973, ring nets were eliminated in 1990. When a limited entry program was initiated in 1985, ring net fishermen were not included in the program. Thus, although ring nets remained as legal gear until 1990, no permits were issued for ring net gear.

# **Major Concerns**

- Limiting the commercial fishermen to ring nets could reduce the gear and fishing efficiency to a level where continued commercial fishing may not be feasible.
- Allowing a new gear type would require specifications of the gear and operation. Additional capitalization would be required by the commercial fleet
- Allowing a new gear type would result in development of a new user group for a fully utilized resource.

- This proposal is primarily allocative and the department's position is neutral. The proposal appears to be intended to eliminate commercial fishing with traditional gear in most areas supporting king crab in Southeast Alaska.
- The present harvest rate based management plan is conservative and will provide surplus harvests of red king crab based on stock strength, size class contribution, and distribution. Fishery management decisions consider the fishing efficiency of current gear, such that more fishing time will be allowed if catch rates are slower.

PROPOSAL #27, PAGE #14, 5 AAC 34.040. GEAR FOR KING CRAB and 5 AAC 77.010. METHODS, MEANS, AND GENERAL RESTRICTIONS. Require use of nine inch stretched mesh webbing on one third of one vertical surface of all red king crab pots.

WHAT WOULD THE PROPOSAL DO?: This proposal would require the use of nine inch stretched mesh webbing on at least one-third of one vertical surface of the pot.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations do not require minimum mesh webbing.

## WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Existing commercial and personal use king crab pots will need to be modified by replacement of part of the existing webbing with the minimum mesh required.
- Sublegal male and female red king crab and most sizes of Tanner and Dungeness crabs could escape more easily from king crab pots.
- The intent of these regulations would be to minimize handling of non-legal segments of the king crab stocks.

#### **BACKGROUND:**

- Minimum mesh requirements are passive management tools to enhance escape of small males and females from commercial pots, thereby reducing handling stress and associated mortality.
- As interest and harvest of red king crabs has increased during recent years, various methods have been proposed to maintain a high abundance of harvestable crabs and to foster their recovery in areas where they are not yet at high historical levels.

- There is an increasing need for gear modifications that will enhance passive sorting of sublegal and female crabs. However, until personal use king crab pots are differentiated from other personal use pot gear, a personal use regulation would be meaningless because a crabber could legitimately claim that his king crab pot was actually some other kind of pot gear, exempt from the minimum mesh requirement.
- Until personal use pot gear is defined, the department suggests that the Board limit its discussion to commercial gear and consider Proposal 28 in lieu of this proposal, since available research suggests that a 10 inch webbing would more effectively pass sublegal male king crab.

PROPOSAL #28, PAGE #14, 5 AAC 34.125. LAWFUL GEAR FOR AREA A. Require escape mechanisms for commercial king crab pots in Southeast Alaska.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would require that commercial red king crab pots have at least one-third of one vertical surface of the pot webbed with no less than 10 inch stretch mesh, or not less than four circular escape rings of 6 and 1/4" minimum inside diameter on each vertical surface of the pot.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations do not require minimum mesh webbing or use of escape rings for commercial and personal use pot gear. There are no other passive sorting requirements for king crab gear in commercial or personal use fisheries in Southeast Alaska.

# WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Existing commercial king crab pots will need to be modified by replacement of part of the webbing with the minimum mesh required or by insertion of four circular escape rings.
- Sublegal male and female king crab could escape more easily from crab pots.

#### **BACKGROUND:**

- Minimum mesh sizes and escape rings enhance escape of sublegal males and females from pots, reducing handling stress and associated mortality. The best available data suggests that a 10 inch minimum stretch mesh or escape rings of 6 and 1/4 inch inside diameter will pass most sublegal and female crabs while retaining almost all legal male crabs.
- Neither measure has been implemented in the past for red king crab, although escape rings were required for commercial Tanner crab pots for two seasons in the late 1980s and there is a minimum mesh requirement for shrimp pots.
- Crabbers were generally supportive of escape rings when daily catch rates and season length favored multiple day soak times. Multiple day soaks generally exceed the attractive period of bait and under these conditions escape rings effectively pass sublegal and female crabs.
- The current red king crab fishery is managed to spread the allowable catch over a period of about three weeks. At least during the latter part of the season, many participants will be soaking their gear for more than one day.
- The proposed regulations would be implemented on October 1, 1997, to permit crabbers more time to reconfigure their gear.

- Minimum mesh requirements are more difficult to clearly define than escape rings. If adopted, escape ring placement on pots should be specified, based on public testimony on the most effective height of rings above the bottom of the pot.
- Top-loading pots could be more easily reconfigured from king to Tanner crab gear with escape rings than minimum mesh panels.
- The department recommends adoption of this proposal.

PROPOSAL #29, PAGE #15, 5 AAC 34.050. GEAR FOR KING CRAB. and 5 AAC 77.010. METHODS, MEANS, GENERAL RESTRICTIONS.

WHAT WOULD THE PROPOSAL DO?: This proposal would require that all commercial and personal use king crab pots have escape rings. It does not specify ring size, number, or other details.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations do not require escape rings for commercial and personal use pot gear. There are no other passive sorting requirements for king crab gear in commercial or personal use fisheries in Southeast Alaska.

## WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Circular escape rings will need to be installed in all king crab pot gear in Southeast Alaska.
- Sublegal male and female king crab could escape more easily from crab pots.

#### **BACKGROUND:**

- Escape rings are passive management tools to enhance escape of sublegal males and females from commercial pots, thereby reducing handling stress and associated mortality.
- Use of escape rings has a precedent in Southeast Alaska because they were required for commercial Tanner crab pots for two seasons in the late 1980s.
- Commercial crabbers were generally supportive of escape rings, when the daily catch rates and season length favored multiple day soak times. Multiple day soaks generally exceed the attractive period of bait and escape rings more effectively passed sublegal and female crabs.
- The current commercial red king crab fishery is managed to spread the allowable catch over a period of about three weeks. At least during the latter part of the season, many participants will be soaking their gear for more than one day.
- Enforcement of escape rings on personal use king crab pots will be difficult because personal use king crab pot gear is undefined. A pot that effectively retains king crab could be defined as some other type of pot by the personal use crabber and excluded from the escape ring requirement.

**DEPARTMENT COMMENTS:** The department submitted and supports Proposal 28, which is more comprehensive than this proposal for commercial pots, and specifies options, such as escape panels as well as rings. Until comprehensive personal use pot gear definitions are adopted an escape ring requirement for personal use king crab pots would be unenforceable.

# PROPOSAL #30, PAGE #15-16, 5 AAC 34.050. GEAR FOR KING CRAB

WHAT WOULD THE PROPOSAL DO?: This proposal would provide a maximum size of 4' for red king crab pots in Southeast Alaska (Statistical Area A).

NOTE: This proposal refers to the general specifications for king crab gear. Also, it is assumed that the author intended to specify a maximum dimension of 4' x 4' for sideloading gear with no height restrictions, a maximum diameter of 4' with no height restrictions for cone gear, and maximum dimensions of 4' x 4' with no height restrictions for stacking pyramid style pots.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit the use of any type of pot which meets the specifications in 34.050 (f) and (g) as long as the gear is properly marked and fished. Current maximum dimensions are 10' x 10' by 42". This is a statewide regulation adopted in 1994.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The adoption of this proposal would reduce the effectiveness of gear commonly used in the Southeast Alaska (Statistical Area A) red king crab fishery.

**BACKGROUND:** Early commercial fishing regulations permitted harvest by pots, trawls, ring nets and diving. Trawls were eliminated as legal gear in 1960, diving in 1973, ring nets in 1990. When a limited entry program was initiated in the Southeast Alaska king and Tanner crab fisheries in 1985, ring net fishermen were not included. Although ring nets remained as legal gear until 1990, no licenses were issued for ring gear prior to the prohibition.

## **MAJOR CONCERNS:**

- Reducing the size of pots utilized would reduce the efficiency of the commercial fleet.
- A change in gear specifications would result in a considerable capital outlay for new gear.
- Complete specifications for this change in gear dimensions should be provided in regulation.

- It appears that this proposal is primarily allocative. The department's position is neutral.
- The present harvest rate based management plan is conservative and will continue to provide surplus harvests of red king crab based on stock strength, size class contribution, and distribution. Management decisions under this plan consider current gear efficiency, such that more fishing time will be allowed if catch rates are slower.

PROPOSAL #31, PAGE #16, 5 AAC 77.025. USE OF COMMERCIALLY LICENSED VESSELS.

WHAT WOULD THE PROPOSAL DO?: This proposal would prohibit personal use crabbing from a vessel registered as a commercial crabbing vessel.

WHAT ARE THE CURRENT REGULATIONS?: In most sections of the commercial shellfish regulations, personal use fishing with pot gear is prohibited for 14 days prior to the opening and 14 days after the closure of a commercial season for shrimp or crabs. At most other times commercial shellfishers can legally use personal use pot gear for these species.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Commercially registered vessels would not be allowed to participate in personal use crab fisheries.

#### **BACKGROUND:**

- A number of crab and shrimp commercial pot permit holders legally personal use fish with their commercial vessels and gear during periods permitted in the commercial and personal use regulations. Personal use fishing in this manner has been an on-going activity for many years. It has become more controversial as both commercial and personal use fisheries have intensified over the past decade and become more direct competitors in some historically productive areas around major communities.
- As commercial seasons intensified and seasons shortened, some commercial crabbers set gear
  marked for personal use before the start of the commercial season to find aggregations of
  legal crab. After the season opened, they set commercial pots on these crab. This practice
  led to preemption of grounds, high concentrations of gear on the most productive grounds,
  and gear conflicts.
- Increasingly restrictive regulations have curbed the most obvious test-fishing by prohibiting the use of pot gear by commercial crabbers for 14 days before a commercial season.

- There are a few loopholes in the current regulations prohibiting preseason test-fishing with personal use gear by commercial crabbers. The department submitted and supports proposal 33 to prohibit use of all pot gear and ring nets for 14 days before the start of a commercial Tanner and red king crab fisheries. Proposal 33 should close remaining loopholes in this regulation.
- If adopted, wording on the regulation would have to be carefully crafted because if it is keyed to vessel registration, an operator or permit holder could postpone registration and test-fish with personal use gear until just before the commercial season opens.

PROPOSAL #32, PAGE #16, 5 AAC 77.025. USE OF COMMERCIALLY LICENSED OR REGISTERED VESSELS.

WHAT WOULD THE PROPOSAL DO?: This proposal would prohibit personal use king crabbing by any commercial fishing vessel registered to fish in any ADF&G Region 1 areas.

WHAT ARE THE CURRENT REGULATIONS?: Commercial shrimp and crab vessels in Southeast Alaska can legally fish under personal use regulations except for 14 day periods before and after commercial openings for which they are registered.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Commercial fishing vessels could not be used for personal use red king crab fishing.

#### **BACKGROUND:**

- A number of crab and shrimp commercial pot permit holders legally personal use fish with their commercial vessels and gear during periods permitted in the commercial and personal use regulations. Personal use fishing in this manner has been an on-going activity for many years. It has become more controversial as both commercial and personal use fisheries have intensified over the past decade and become more direct competitors in some historically productive areas around major communities.
- As commercial seasons intensified and seasons shortened, some commercial crabbers set gear
  marked for personal use before the start of the commercial season to find aggregations of
  legal crab. After the season opened, they set commercial pots on these crab. This practice
  led to preemption of grounds, high concentrations of gear on the most productive grounds,
  and gear conflicts.
- Increasingly restrictive regulations have curbed the most obvious test-fishing by prohibiting the use of pot gear by commercial crabbers for 14 days before a commercial season.

- There are a few loopholes in the current regulations prohibiting preseason test-fishing with personal use gear by commercial crabbers. The department submitted and supports proposal 33 to prohibit use of all pot gear and ring nets for 14 days before the start of a commercial Tanner and red king crab fisheries. Proposal 33 should close remaining loopholes in this regulation.
- If adopted, wording on the regulation would have to be carefully crafted because if it is keyed to vessel registration, an operator or permit holder could postpone registration and test-fish with personal use gear until just before the commercial season opens.

# PROPOSAL #33, PAGE #16, 5 AAC 34.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would prohibit the use of pot or ringnet gear of any kind by a person or vessel intending to participate in the commercial red king crab fishery, during the 14 days before the opening of the season.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit fishing with shrimp or Dungeness crab pots during the 14 days before a red king crab fishery and do not prohibit the use of rings to test-fish during this period.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- An existing loophole in the regulations will be eliminated.
- Some red king crabbers who are also commercial pot shrimp or Dungeness crab fishermen
  will lose the two weeks preceding a red king crab fishery from their shrimp and Dungeness
  crab seasons.
- The red king crab fishery will have a fairer start.
- The fishery will be more manageable. In-season catch data for all participants will better reflect the composition of crab stocks on major fishing grounds.

#### **BACKGROUND:**

- Red king crab abundance varies greatly throughout Southeast Alaska. Within an area, they tend to aggregate by size and sex.
- Pre-season information on aggregations of legal crabs obviates having to search for good fishing grounds after the season opens. Immediate concentration of gear on the most productive areas results in preemption of fishing grounds and much higher initial catch rates by those who have test-fished.
- Currently, red king crabbers cannot test-fish with commercial, subsistence, or personal use pots (other than shrimp or Dungeness pots), during the 14 days preceding a commercial red king crab season, but they could use ring nets (under personal use, sport, or subsistence regulations) to prospect during this period.

- The existing shortcomings in the regulations provide enough of an economic advantage to be useful to the few people who would exploit them.
- The department opposes pre-season test fishing because it detracts from an orderly fishery, complicates data analysis, and promotes preemption of fishing grounds.
- The department supports this proposal.

# PROPOSAL #34, PAGE #17, 5 AAC 77.664. PERSONAL USE KING CRAB FISHERY.

**WHAT WOULD THE PROPOSAL DO?:** This proposal would increase the daily bag and possession limit to six crabs and the pot limit to five pots per person or 10 pots per vessel in the Juneau area personal use red king crab fishery.

WHAT ARE THE CURRENT REGULATIONS?: The personal use bag limit for king crab in the Juneau personal use fishing area (commercial fishing sections 11-A, 12-B, and 15-C) is three crabs per day and in possession. The pot limit in this area is four pots per person and four pots per vessel.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Analysis of personal use creel census data by Sport Fish Division indicates that increasing the bag limit in the Juneau area to six king crab could result in a 20% increase in harvest. See Suchanek, 1995, "The Personal Use King Crab Fishery in Southeast Alaska".
- Increasing the pot limit to five pots per person and 10 pots per vessel could increase the harvest by about four percent. (Suchanek, 1995).
- Increased harvests in the summer personal use pot fishery would reduce the availability of crab to commercial fishing and to spring personal use pot and dive fishery.

#### **BACKGROUND:**

- In March 1995, the personal use bag limit for king crab in the Juneau area was reduced to three per day and three in possession. The pot limit was reduced to four pots per person and four pots per vessel. The reductions resulted from data suggesting that the personal use fishery in the Juneau area was expanding and catches were increasing.
- The intent was to slow the catch rates in this area to provide for continued harvest through the entire personal use harvest period from July 1 through March 31.

- The department suggests that the Board consider comprehensive regulations for allocation of harvests among users.
- It is likely that personal use effort for red king crab will continue to increase in the Juneau area. Allowable harvest levels for red king crab will be reached in a shorter period of time if this proposal is adopted.

# PROPOSAL #35, PAGE #18, 5 AAC 77.664. PERSONAL USE KING CRAB FISHERY.

WHAT WOULD THE PROPOSAL DO?: This proposal would change the personal use king crab bag limit to four crab per day in the Juneau area personal use king crab fishery.

WHAT ARE THE CURRENT REGULATIONS?: The personal use bag limit for king crab in the Juneau personal use fishing area (commercial fishing sections 11-A, 12-B, and 15-C) is three crabs per day and in possession.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED:

- Analysis of personal use creel census data by Sport Fish Division indicates that increasing the bag limit from three to four crabs per day in the Juneau area could result in an increase in catch of about 10%. See Suchanek, 1995, "The Personal Use King Crab Fishery in Southeast Alaska".
- Increased harvests in the personal use pot fishery will reduce the availability of crab to commercial fishing and to the personal use dive fishery.

#### **BACKGROUND:**

- In March 1995, the personal use bag limit for king crab in the Juneau area was reduced to three per day and three in possession. The reductions resulted from data suggesting that the personal use fishery in the Juneau area was expanding and catches were increasing.
- The intent of this regulation and a pot limit reduction, also adopted in March, was to slow the catch rate in this area to provide for continued harvest through the entire personal use harvest period from July 1 through March 31.

- The department suggests that the Board consider comprehensive regulations for allocation of harvests among user groups.
- It is likely that personal use effort in the Juneau area will increase in the future, for various reasons, and again approach the allowable harvest for the area. That point will be reached in a shorter period if a higher bag limit is adopted.

PROPOSALS #36-39, PAGES #18-19, 5 AAC 77.010. METHODS, MEANS, AND GENERAL RESTRICTIONS.

WHAT WOULD THE PROPOSAL DO?: This proposal would define personal use king crab pots by size, weight, or a combination of both.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations do not limit the size, weight, or configuration of personal use king crab pots nor provide a definition of personal use king crab pots.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- The personal use fleet would be slightly less efficient. Some reduction in personal use harvests would be expected but the reduction cannot be quantified with available information.
- Crabbers using commercial square or conical pots to personal use fish would have to obtain smaller pots, since most standard commercial king crab pots are larger or heavier than those being proposed.

#### **BACKGROUND:**

- The personal use king crab fishery in the Juneau area has grown to directly compete with the commercial red king crab fishery for the allowable harvest level of red king crab in local waters. In recent summer seasons, personal use crabbers have taken a major part of the allowable catch in the Juneau area before the commercial opening in the winter.
- Both the personal use and commercial king crab fisheries have become increasingly restricted in the Juneau area, either by department management actions or Board directives.
- Commercial crab pots are probably more efficient than smaller pots generally used by most personal use crabbers fishing from smaller boats or skiffs. However, their larger size and weight require use of larger vessels and heavier deck gear for setting and pulling them. Reducing the size or weight of personal use pots will negate, to some extent, the advantage of using larger vessels to work larger, heavier pots.

#### **DEPARTMENT COMMENTS:**

Defining personal use king crab pots by size, configuration, or weight will not produce the
desired result unless all other personal use pot gear is also defined in some manner to make
them species-specific. For example, someone could claim that the commercial king crab pot
he was fishing was a Dungeness or Tanner crab pot, exempt from the personal use king crab
pot size or weight limit.

# PROPOSAL #40, PAGE #20, 5 AAC 47.020 and 5 AAC 47.035. ESTABLISH A SPORT FISHERY FOR KING CRAB IN SOUTHEAST ALASKA.

WHAT WOULD THIS PROPOSAL DO? This proposal would establish sport fishing regulations for king crab in the Southeast Alaska area that include:

Fishing Season: July 1 through March 31

Bag Limit: 3 crab per person

Crab Pot Limit: 2 pots per person, 4 pots per vessel

WHAT ARE THE CURRENT REGULATIONS? Currently there are no sport fishing regulations for king crab in the Southeast Alaska area.

#### **BACKGROUND:**

- Prior to 1989 nonresidents were allowed to harvest king crab and other shellfish under personal use regulations. In 1989 the legislature amended a statute that prohibited nonresidents from participating in all personal use fisheries. In February, 1989 the board adopted sport fishing regulations for shellfish in Southeast Alaska which included a king crab bag limit of zero.
- Alaska residents have continued to harvest king crab under personal use regulations. Regional king crab personal use regulations provide for a season from July 1 through March 31. The daily bag and possession limit is 6 crab per person and a limit of 5 pots per person or 10 pots per vessel. More restrictive regulations (very similar to the proposed sport fishing regulations) were adopted by the board in March, 1995 for the personal use king crab fishery in the Juneau area.

# WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?

- The department expects that the harvest of king crab would increase by some amount if the board adopts this proposal, but we are unable to estimate the magnitude of the king crab harvest by nonresidents.
- King crab harvest estimates are available from the regional creel survey program in 1988. However, this harvest information can not be separated between residents and nonresidents.
- King crab harvest estimates are also available from the Statewide Harvest Survey beginning in 1992. However, nonresidents have been prohibited from harvesting king crab in Southeast Alaska since 1989, so no information is available on the harvest by nonresidents.
- The harvest of king crab in the personal use fisheries has increased significantly since 1989. Allowing an additional fishery for nonresidents may result in progressively restrictive regulations for all other user groups.

**DEPARTMENT COMMENTS:** The department is neutral on this proposal because it is allocative in nature. If the board chooses to adopt this proposal the department will be able to estimate the harvest of king crab by nonresidents through the statewide harvest survey program.

# PROPOSAL #41, PAGE #20, 5 AAC 47.020 and 5 AAC 47.035. ESTABLISH A SPORT FISHERY FOR KING CRAB IN SOUTHEAST ALASKA.

WHAT WOULD THE PROPOSAL DO?: This proposal would establish sport fishing regulations for king crab in the Southeast Alaska area that include:

Fishing Season: June 1 through September 30

Bag Limit: 2 crab per person

Crab Pot Limit: 2 pots per person, 4 pots per vessel

WHAT ARE THE CURRENT REGULATIONS?: Currently there are no sport fishing regulations for king crab in the Southeast Alaska area.

#### **BACKGROUND:**

- Prior to 1989 nonresidents were allowed to harvest king crab and other shellfish under personal use regulations. In 1989 the legislature amended a statute that prohibited nonresidents from participating in all personal use fisheries. In February, 1989 the board adopted sport fishing regulations for shellfish in Southeast Alaska which included a king crab bag limit of zero.
- Alaska residents have continued to harvest king crab under personal use regulations. Regional king crab personal use regulations provide for a season from July 1 through March 31. The daily bag and possession limit is 6 crab per person and a limit of 5 pots per person or 10 pots per vessel. More restrictive regulations were adopted by the board in March, 1995 for the personal use king crab fishery in the Juneau area.

# WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- The department expects that the harvest of king crab would increase by some amount if the board adopts this proposal, but we are unable to estimate the magnitude of the king crab harvest by nonresidents.
- King crab harvest estimates are available from the regional creel survey program in 1988. However, this harvest information can not be separated between residents and nonresidents.
- King crab harvest estimates are also available from the Statewide Harvest Survey beginning in 1992. However, nonresidents have been prohibited from harvesting king crab in Southeast Alaska since 1989, so no information is available on the harvest by nonresidents.
- The harvest of king crab in the personal use fisheries has increased significantly since 1989. Allowing an additional fishery for nonresidents may result in progressively restrictive regulations for all other user groups.

**DEPARTMENT COMMENTS:** Although the department is neutral on this proposal because it is allocative in nature, if the board decides to adopt this proposal, we recommend that the season open on July 1, which is the opening date for the personal use king crab season, rather than June 1. Having the same opening date would be an aid to protection officers monitoring the fisheries. In addition, an opening date of July 1 would provide additional protection to female king crab which are still molting and mating during the month of June. If the board chooses to adopt this proposal the department will be able to estimate the harvest of king crab by nonresidents through the statewide harvest survey program.

### PROPOSAL #42, PAGE #21, 5 AAC 34.XXX. LOGBOOKS.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would specifically encode in regulation a logbook reporting requirement that has been mandatory for two years and generally justified as "data necessary for reports required by the department" (5 AAC 39.130 (d)).

WHAT ARE THE CURRENT REGULATIONS?: The current regulation regarding reports required of shellfish fishermen is very general and does not provide detailed instructions or descriptions of logbooks.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The logbook requirement would be mandatory and enforceable. The responsibilities of both crabber and buyer would be clearly described.

#### **BACKGROUND:**

- As the commercial red king crab season in Southeast Alaska has shortened to a period of less than three weeks, in-season management tools, such as fish tickets, once used to track daily and cumulative catch rates, have become inadequate.
- The red king crab harvest ceiling is a sum total of contributions from discontinuous, historically productive areas in northern Southeast Alaska that are surveyed by the department each summer. The season length is based on projections of overall catch rates demonstrated by the fleet during the most recent seasons. One of the shortcomings of this system is that fishing effort on a weaker stock may be high enough to cause local depletion while catch rates on stronger stocks support continued fishing.
- Logbooks are the only means currently available to apportion catch with sufficient detail to detect daily catch trends by bay, inlet, or fishing ground and permit in-season management actions to prevent local over-exploitation.
- Entries in logbooks are also used to correct fish tickets if there are any inconsistencies in the ticket data and to verify distribution of gear and location of vessels observed during overflights of the fishery.

- Resource management would benefit. Logbook data is better than fish ticket data since it is entered daily in much finer detail. Although the data is most valuable for in-season management, it is also useful for setting subsequent season lengths.
- The department intends to require use of logbooks for the red king crab fishery regardless of whether this proposal is adopted. The department supports adoption of this proposal because it would provide clear instructions in regulations and negate the need to issue an emergency order or regulation requiring logbooks each season.

# PROPOSAL #43, PAGE #21, 5 AAC 34.XXX. DESCRIPTION OF BLUE KING CRAB FISHING AREAS WITHIN STATISTICAL AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would provide detailed descriptions of areas open to commercial crabbing for blue king crab during red king crab and Tanner crab fisheries.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations provide for a commercial fishery for blue king crab but do not specify areas which are open to harvest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Areas and seasons open to blue king crab fishing would be specified in regulation and would not need to be detailed in an emergency order before every commercial red king and Tanner crab season.

#### **BACKGROUND:**

- Blue king crab is open to commercial harvest only during the red king and Tanner crab fisheries, where they are generally caught incidentally in some areas to directed harvest of red king or Tanner crab. They are widely distributed but most concentrated in glacially-fed mainland fjords, where they occasionally occur in sufficient numbers to be secondarily targeted by crabbers fishing for red king or Tanner crab.
- The existing regulations do not provide descriptions of areas of blue king crab concentrations where sufficient numbers of blue king crab occur to support a directed harvest.
- Areas open to fishing for blue king crab must now be defined in emergency orders issued before each red king and Tanner crab fishery.

- Since areas open to blue king crab fishing will most likely remain the same for the foreseeable future, defining them in regulation would negate the need to specify them by emergency order each time the commercial red king or Tanner crab fisheries reopen.
- The department supports this proposal.

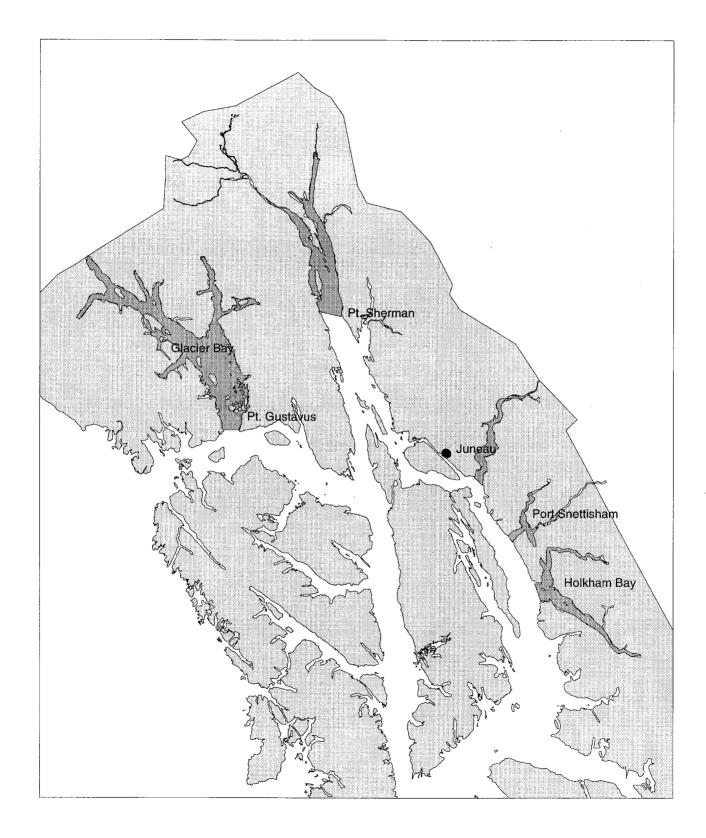


Figure 5. Proposal 43. Define blue king crab fishing areas.

# PROPOSAL #44, PAGE #22, 5 AAC. 35.020. REGISTRATION.

WHAT WOULD THE PROPOSAL DO?: This proposal would establish a separate superexclusive registration, a January 15 opening date, a guideline harvest ceiling (GHC) based on the past ten year average catch, observer coverage, and a registration deadline for the commercial Tanner crab fishery in District 15. It would require retention and safe disposal of all crabs infected with bitter crab disease (BCD).

WHAT ARE THE CURRENT REGULATIONS?: The current regulations for Southeast Alaska include superexclusive registration, an opening on February 15, a GHC of 2,000,000 lbs, and registration of all participating vessels. A BCD management plan (5 AAC 35.120) provides for potentially earlier seasons, fishing restrictions, reporting requirements, and restrictions on transport for areas with high incidence of BCD. Implementation of the plan is at the discretion of the department on an area and season basis. There are no regulations addressing disposal of bitter crabs.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- District 15 would require separate management from all other areas in Southeast Alaska.
- Commercial Tanner crab permit holders who registered to fish in District 15 would be precluded from fishing in other areas.

#### **BACKGROUND:**

- BCD is caused by a very specialized dinoflagellate that imparts a bitter, astringent taste to an infected crab before killing it. The mode of transmission of the disease, possible role of intermediate hosts, and significance of spore and vegetative stages are unknown.
- BCD was first identified in the mid-1980's from crabs collected in Lynn Canal. Although other areas in Southeast Alaska also have infected crab, few have incidences as high as Lynn Canal.
- In recognition of the severity of the problem in District 15, the department has, during two recent seasons, either closed the area to commercial harvest or restricted transport of crabs caught in District 15. The current BCD management plan incorporates many of the measures being proposed but is not specific to District 15.

- The January 15 opening date proposed will result in harvest of bitter crabs at an earlier stage in the infection cycle. However, this is not likely to improve their marketability.
- Proposing a quota set at the ten-year average is probably acceptable for District 15, as it represents both some relatively high and low years.
- A registration deadline is probably unnecessary.
- Retention and disposal of bitter crab would be highly dependent on whether processors are willing to deal with the problem.

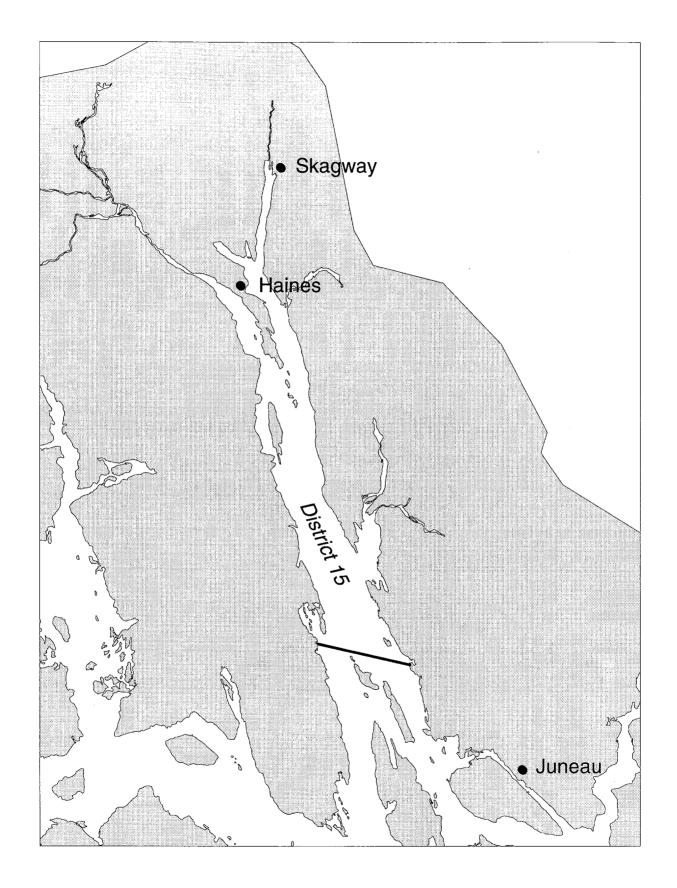


Figure 6. Proposal 44. District 15 superexclusive Tanner crab area.

PROPOSAL #45, PAGE #23, 5 AAC 35.125. LAWFUL GEAR FOR AREA A. Reduce the Tanner crab pot limit from 100 to 50 in Southeast Alaska.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would reduce the number of pots that may be fished by a commercial Tanner crab vessel in Southeast Alaska to 50 pots. In the unlikely event that a Tanner crab fishery and a red king crab fishery are open simultaneously, it further reduces the amount of pot gear to an aggregate of no more than 20 pots.

WHAT ARE THE CURRENT REGULATIONS?: A maximum of 100 pots may be commercially fished for Tanner crab in Southeast Alaska inside the surfline and in Lituya Bay. There is no pot limit outside the surfline to the 200 mile limit.

#### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

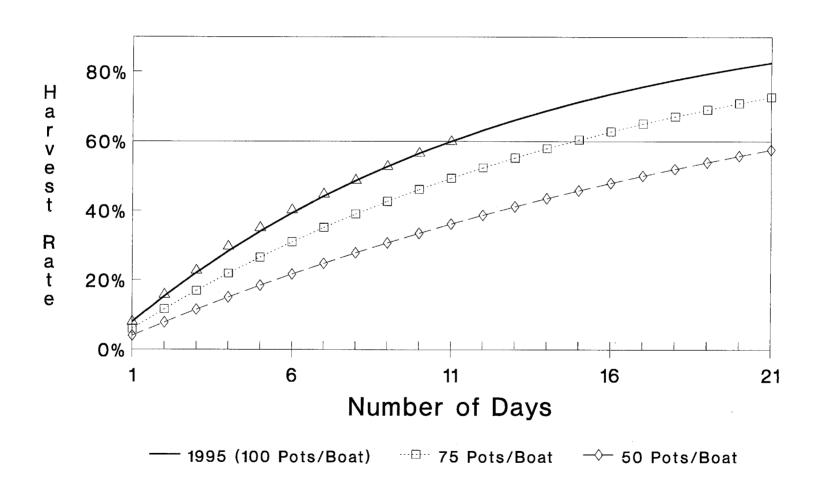
- The maximum number of pots that could be commercially fished for Tanner crab would be halved in areas with existing pot limits and set at 50 pots in areas with no existing limits.
- A pot limit of 50 in the aggregate for Tanner and brown king crab during periods when both fisheries are open will be necessary.
- The desired effect of this proposal is to increase the time required for the fleet to reach the guideline harvest level, thereby allowing the department to use in-season management for this fishery. There will be some associated costs for crabbers, processors, and the department.
- With increasing interest in deepwater tanner species outside the traditional fishing areas, a 50 pot limit outside the surf line will promote a more orderly development of these new fisheries and consistently apply pot limits throughout the registration area.

#### **BACKGROUND:**

- The Southeast Alaska commercial Tanner crab fishery has had a 100 pot limit since the mid 1970s. Since then, the number of participants has doubled and seasons have shortened to less than two weeks.
- The department's in-season management program is based on fish ticket and logbook data. It requires a minimum season length of about three weeks, during which most participants make at least three landings and the catch information is collected and analyzed. The model incorporates port sampling information and uses an estimate of overall exploitation rate to set the appropriate season length.

- The department prefers to conduct in-season management for this fishery because it is less risky than using historical catch trends to set a harvest level for the season. When the season is less than about three weeks long, in-season management is not possible.
- If there is no pot reduction and the season continues to be shorter than about three weeks, the department will rely heavily on past catch trends to preset a guideline harvest ceiling before the start of a season. It will be very conservative to minimize the risk of recruitment overfishing and stock depletion.

Figure 7. Estimated harvest rate for pot limits of 50, 75, and 100 pots per boat.



# PROPOSAL # 46, PAGE #24, 5 AAC.35.125. LAWFUL GEAR FOR AREA A (m) NEW PARAGRAPH

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would require that commercial tanner crab pots have at least one-third of one vertical surface of the pot webbed with no less than 6 inch stretch mesh, or not less than four circular escape rings of 4 and 3/4" minimum inside diameter on each vertical surface of the pot.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations do not require minimum mesh webbing or use of escape rings.

### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Existing Tanner crab pots will need to be modified by replacement of part of the webbing with the minimum mesh required or four circular escape rings will need to be installed.
- Sublegal male and female Tanner crab could escape more easily from crab pots.

#### **BACKGROUND:**

- Minimum mesh requirements are passive management tools to enhance escape of small
  males and females from commercial pots, thereby reducing handling stress and associated
  mortality.
- Use of two escape rings was mandatory for all commercial Tanner crab pot gear in the mid-1980's. It was repealed by the Board upon request of crabbers who felt that it was not fulfilling its function when short, one-day soaks became prevalent with the intensification of the fishery in the early 1990's.

- Despite the short soak times characteristic of recent seasons, staff feels that there is increasing need for gear modifications that would enhance passive sorting of unmarketable crabs.
- An option that was considered and shelved was use of larger mesh in the bottoms of pots to maximize sorting during lifting of gear. The wide use of conical or pyramidal pots with pucker-string type bottom webbing would make definition and enforcement of a bottom web requirement very difficult.

## PROPOSAL #47, PAGE #25, 5 AAC.35.125. LAWFUL GEAR FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would prohibit the use of pot or ringnet gear of any kind by a person or vessel intending to participate in the commercial Tanner crab fishery, during the 14 days before the opening of the season.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit fishing with shrimp or Dungeness crab pots during the 14 days before a Tanner crab fishery and do not prohibit the use of rings to test-fish during this period.

# WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- An existing loophole in the regulations will be eliminated.
- Some Tanner crabbers who are also commercial pot shrimp or Dungeness crab fishermen will lose the two weeks preceding a Tanner crab fishery from their shrimp and Dungeness crab seasons.
- The Tanner crab fishery will have a fairer start.
- The fishery will be more manageable. In-season catch data for all participants will better reflect the composition of crab stocks on major fishing grounds.

#### **BACKGROUND:**

- Tanner crab abundance varies greatly throughout Southeast Alaska. Within an area, they tend to aggregate by size and sex.
- Pre-season information on aggregations of legal crabs obviates having to search for good fishing grounds after the season opens. Immediate concentration of gear on the most productive areas results in preemption of fishing grounds and much higher initial catch rates by those who have test-fished.
- Currently, <u>pot</u> fishermen cannot test-fish with commercial, subsistence, or personal use pots (other than shrimp or Dungeness pots), during the 14 days preceding a commercial Tanner crab season, but both pot and ring net permit holders could use ring nets to prospect during this period.
- Dungeness crab pots, which can currently be legally used during the 14 day, pre-season period, could be used to test-fish for Tanner crab in the few districts open to Dungeness crabbing during the Tanner crab fishery.

- The existing shortcomings in the regulations provide enough of an economic advantage to be useful to the few people who would exploit them.
- In-season management of the fishery is highly dependent on the initial series of landings reported by crabbers. Conclusions on stock status may be flawed if initial catch rates are inflated by those crabbers using pre-season test-fishing information to target aggregations of legal crabs.

# PROPOSAL #48, PAGE #25, 5 AAC 35.110. FISHING SEASONS FOR AREA A.

WHAT WOULD THE PROPOSAL DO?: This proposal would change the time of the season opening for the commercial Tanner crab fishery in Southeast Alaska from 12:00 noon to 9:00 a.m. and the closure from 12:00 noon to 9:00 a.m.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations specify opening times of 12:00 noon for all crab fisheries in Southeast Alaska. Closures for Tanner crab are timed for 12:00 noon, by emergency order. No recent opening of this fishery has extended to the regulatory closure on May 1.

### WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- Crabbers will have more daylight hours in which to set their gear. In areas with high concentrations of gear, loss of gear may be reduced. However, most vessels have high intensity lights for avoiding other gear and the ability to mark their own set locations with either Loran or GPS and radar at night.
- The ability for Fish and Wildlife Protection to monitor openings and closures will be diminished, since 9:00 a.m. is, at most, only an hour after planes operating under VFR could leave base to conduct overflights of the major fishing grounds. This would mean that those crabbers willing to accept the risk could have most of their pots positioned and fishing for hours before the fishery starts in the morning.

#### **BACKGROUND:**

- The current opening times for commercial crab fisheries permits enforcement and management overflights prior to and during the initial phases of gear deployment.
- The closure times are not as critical, but a closure at noon permits the fleet to lift their last pots and either stack them or store them in water during daylight. Enforcement overflights to confirm cessation of fishing is possible for up to four hours after the closure.

- The current opening times and closing times were adopted over a number of years.
- These set times are an increasingly important management and enforcement tool as competition intensifies and seasons grow progressively shorter.
- Current opening and closing times are a compromise that allows crabbers to deal with startup problems and set up to half their gear limit of 100 pots before dark on the first day of the fishery and to pick the last of their gear during the pre-noon hours on the last day of the fishery.
- The department supports the regulations currently on the books.

# PROPOSAL #49, PAGE #26, 5 AAC 35.151. AREA A CLOSED WATERS.

WHAT WOULD THE PROPOSAL DO?: This proposal would close the waters of Taiya Inlet north of the latitude of Taiya Point to commercial Tanner crab fishing.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations permit commercial Tanner crab fishing in Taiya Inlet during the general opening in Southeast Alaska.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Commercial Tanner crabbers would no longer be permitted to crab in Taiya Inlet.

#### **BACKGROUND:**

- Commercial Tanner crabbing has occurred in Taiya Inlet since the beginning of this fishery in Southeast Alaska.
- The smallest catch reporting subdistrict is 115-34, which includes waters of Lynn Canal north of the latitude of Seduction Point, as well as Taiya Inlet. Taiya Inlet comprises less than half of the total area in 115-34.
- The commercial catch reported from 115-34 probably originates predominately from waters outside Taiya Inlet, since suitable habitat in the inlet is much more limited than further south in the subdistrict.
- Commercial effort and catch from this area have declined since the early 1980s because bitter crab disease infects most Tanner crab in upper Lynn Canal. Less than three crabbers per season reported Tanner crab catches from 115-34 in any of the past six seasons. The department has no way of determining whether the lower catches reflect lower abundance of crab or lack of interest in fishing areas with high prevalence of unmarketable bitter crab.

#### **DEPARTMENT COMMENTS:**

• This proposal is primarily allocative. The department's position on it is neutral.

**PROPOSAL #50, PAGE #26, 5 AAC 35.XXX. LOGBOOKS.** (a) In Area A, all participants in the commercial Tanner crab fishery will complete logbooks provided by the department. Logbooks will be updated daily, sealed in envelopes provided by the department to maintain confidentiality, and submitted to the primary processor or buyer for attachment to the department's copy of the fish ticket.

**WHAT WOULD THE PROPOSAL DO?:** This proposal, submitted by the department, would specifically encode in regulation a logbook reporting requirement that has been mandatory for two years and justified as "data necessary for reports required by the department" (5 AAC 39.130 (d)).

WHAT ARE THE CURRENT REGULATIONS?: The current regulation regarding reports required of shellfish fishermen is very general and does not provide detailed instructions or descriptions of logbooks.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: The logbook requirement would be mandatory and enforceable. The responsibilities of both crabber and buyer would be clearly described.

#### **BACKGROUND:**

- As the commercial Tanner crab season in Southeast Alaska has shortened to a period of less than three weeks, in-season management tools once used to track daily and cumulative catch rates have become inadequate.
- Although it would be possible to set a season length and allowable catch prior to the season, both would be more conservative than the same management decisions based on in-season fleet performance.
- Use of logbooks is the only means now readily available to management to continue inseason management. At that, the department is just barely able to acquire and process the data necessary for in-season management during short, intense seasons.

- Resource management would benefit. Logbook data is better than fish ticket data since it is entered daily in much finer detail. Although the data is most valuable for in-season management, it is also useful in cross-checking fish ticket data and estimating the final exploitation rate.
- The department intends to require use of logbooks for the Tanner crab fishery regardless of whether this proposal is adopted. The department supports adoption of the proposal because it would provide clear instructions within the regulations and negate the need to issue an emergency order or regulation requiring logbooks each season.

PROPOSAL #51, PAGE #27, 5 AAC 35.XXX. PERMITS FOR TANNER AND ANGULATUS TANNER CRAB IN AREA A. Specify permit stipulations for harvesting deep water Tanner crab in the Southeast Alaska area.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would define the terms under which *Chionoecetes tanneri* and *C. angulatus*, two species of deepwater crabs related to the Tanner crab *C. bairdi* may be commercially fished. It would place the appropriate wording into the Tanner crab section of the regulations.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations concerning this fishery are in the Miscellaneous Shellfish section of the regulations, do not refer specifically to either species, and are limited to general terms of a permit that could be issued by the commissioner for their harvest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Regulations specifying conditions under which these two species could be harvested would be detailed in the Tanner crab section of the regulations. These conditions would be considerably more restrictive than those currently in the regulations under Miscellaneous Shellfish.

# **BACKGROUND:**

- Permits to fish for these two deepwater species of crab have infrequently been requested and granted. Permit terms have been very similar to those being proposed for adoption.
- As other fisheries have been closed to new entry or closed for conservation reasons, interest in options such as deepwater crabs has grown.
- Each permit request must currently be separately answered and the general lack of information on permit conditions often frustrates applicants.

# **DEPARTMENT COMMENTS:**

• Clear regulations in the Tanner crab section detailing the conditions and restrictions for commercial harvest of deepwater crabs would facilitate processing applications for permits. Therefore, the department supports this proposal.

# PROPOSAL #52, PAGE #28, 5 AAC 35.180. LAWFUL GEAR FOR AREA D.

WHAT WOULD THE PROPOSAL DO?: This proposal would extend the 100 pot limit currently in effect for the commercial Tanner crab fishery in Yakutat Bay to all waters in Statistical Area D (Yakutat waters between Cape Fairweather and Cape Suckling out to the 200 mile limit).

WHAT ARE THE CURRENT REGULATIONS?: The current regulations limit the number of pots that can be fished in Yakutat Bay to 100 pots. There is no limit on the number of pots that may be fished in other area waters.

# WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

• The pot limit in Statistical Area D would be 100 pots.

#### **BACKGROUND:**

- The 100 pot limit for Yakutat Bay was adopted to limit the amount of gear that could be set by an individual vessel operator in Yakutat Bay.
- The gear limitation in Yakutat Bay is allocative to the extent that it favors the local, small boat fleet whose range is generally limited during winter months to waters in Yakutat Bay.

**DEPARTMENT COMMENTS:** The department's position on gear reduction is further defined in Proposal 53, which asks for an identical reduction in commercial Tanner crab pot gear.

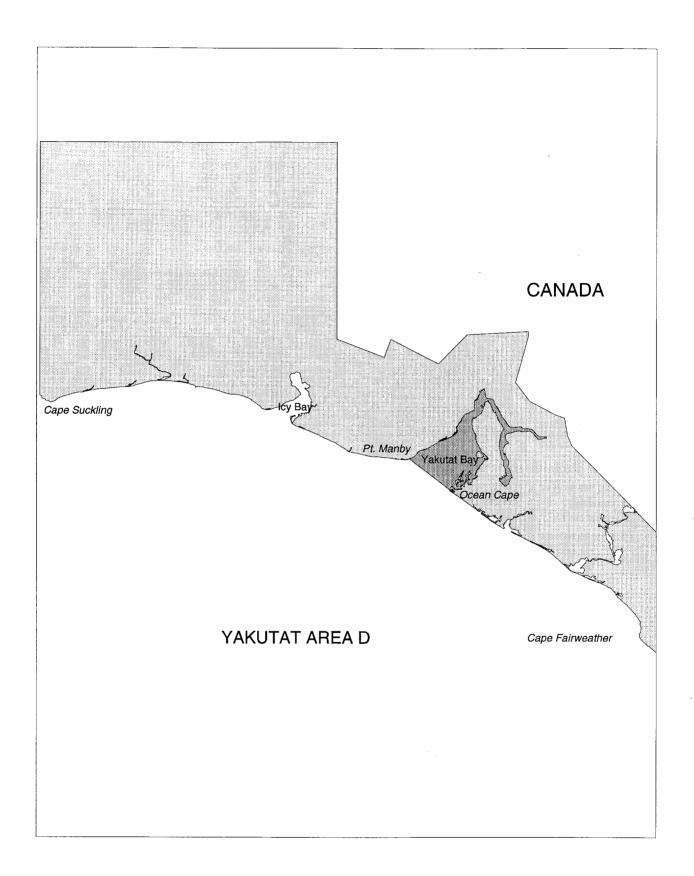


Figure 8. Proposal 52. Extend king and Tanner pot limit to 100 for all of Area D.

**PROPOSAL #53, PAGE #29, 5 AAC LAWFUL GEAR FOR AREA D.** Extend the 100 pot limit for commercial Tanner crab fishing currently in effect for Yakutat Bay to include all waters of Statistical Area D (Yakutat) and include ring nets in the aggregate limit.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would modify wording in the existing regulation limiting commercial Tanner crab pot gear to 100 pots in Yakutat Bay. It would incorporate wording to include ring nets in the limit and to clearly indicate that when both Tanner and king crab seasons are open the pot limit remains 100 pots or rings, in the aggregate.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations limit the number of pots that may be set in Yakutat Bay to 100 pots. No pot limits apply to other waters within the registration area between Cape Fairweather and Cape Suckling.

# WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?:

- The number of pots and rings, in the aggregate, that could be fished in state waters between Cape Fairweather and Cape Suckling and in waters out to 200 miles, would be limited to 100 units of gear.
- The fishing power of larger vessels fishing in areas where there is currently no gear limit will be constrained by the a 100 pot gear limitation.
- Participants will need to purchase buoy stickers to identify their limit of 100 pots or rings.

#### **BACKGROUND:**

- A 100 pot limit for Yakutat Bay has existed in some form since the 1976/77 season.
- Ring nets have been legal gear since at least the 1974/75 season and have never been limited.
- Yakutat stocks collapsed after nearly a decade of high harvests in the 1970s. They have never recovered. Interest and participation have been at low levels through the 1980s and early 1990s. As a result, Statistical Area D is one of the few non-exclusive registration areas remaining in Alaska. It is open to entry by new participants.
- The depressed Tanner crab fishery in Yakutat has remained open because a low-level commercial harvest is the only current means to track stock status.
- Crabbers facing closures, restrictive registration status of most areas, or excluded by limited entry from other areas see the Yakutat fishery as one of their few remaining options. Increasing prices are making marginal areas like Yakutat more attractive to crabbers.
- The level of effort and catch during the past two seasons is probably impeding the possible recovery of the Yakutat Tanner crab stocks.

- Limitation of the effort currently being expended for Tanner crab will aid the recovery of these stocks and discourage participation by larger vessels capable of fishing much larger strings of gear.
- The department supports this proposal.

**PROPOSAL #54**, **PAGE #29**, **5 AAC 35.020. REGISTRATION.** Define Statistical Area D as a superexclusive registration area for Tanner crab.

WHAT WOULD THE PROPOSAL DO?: This proposal would change the registration status of Statistical Area D (Yakutat) between Cape Fairweather and Cape Suckling from its current non-exclusive status to superexclusive status.

WHAT ARE THE CURRENT REGULATIONS?: Statistical Area D is currently a non-exclusive registration area. Any applicant may register for and fish in this area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Statistical Area D would have superexclusive registration status. Any applicant who registers for this area would not be able to fish in any other registration area within the same registration year, which for Tanner crabs is August 1 through July 31.

#### **BACKGROUND:**

- Yakutat remains one of the few non-exclusive registration areas for Tanner crab because there has not been much interest in fishing this area during the 1980s and early 1990s. Crabbing has been unproductive since the stock crashed in the late 1970s, possibly as a result of heavy overfishing.
- Until two seasons ago, the economics of this fishery did not justify participation by any but the local, small boat fleet and one or two larger vessels fishing for Tanners as a secondary fishery.
- Rising prices offered for Tanner crab and possibly a slight improvement in stock abundance during the past two seasons has attracted more attention and increased the effort above the levels prevalent since the early 1980s.

- This proposal from the Yakutat Advisory Committee cites concerns for overharvest as the area attracts numbers of larger crabbing vessels. However, there are also allocative implications, since adoption of the proposal will favor the local, small boat fleet. For this reason, the department is neutral on this proposal.
- Adoption of this proposal, along with Proposal 52 or 53, will reduce the interest of operators of larger vessels in fishing in Yakutat.
- It is likely that harvest levels similar to those of the past two seasons are not sustainable, given the current depressed condition of the Yakutat Tanner crab stocks. In the absence of measures that significantly curtail effort, the department will have to consider more restrictive measures, such as closing much or all of the commercial season in Statistical Area D.

PROPOSAL #55, PAGE #30, 5 AAC 35.XXX. PERMITS FOR TANNERI AND ANGULATUS TANNER CRAB IN AREA D. Specify permit stipulations for harvesting deep water Tanner crab in the Yakutat Area.

WHAT WOULD THE PROPOSAL DO?: This proposal, submitted by the department, would define the terms under which *Chionoecetes tanneri* and *C. angulatus*, two species of deepwater crabs related to the Tanner crab *C. bairdi* may be commercially fished. It would place the appropriate wording into the Tanner crab section of the regulations.

WHAT ARE THE CURRENT REGULATIONS?: Current regulations concerning this fishery are in the Miscellaneous Shellfish section of the regulations, do not refer specifically to either species, and are limited to general terms of a permit that could be issued by the commissioner for their harvest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?: Regulations specifying conditions under which these two species could be harvested would be detailed in the Tanner crab section of the regulations. These conditions would be considerably more restrictive than those currently in the regulations under Miscellaneous Shellfish.

# **BACKGROUND:**

- Permits to fish for these two deepwater species of crab have infrequently been requested and granted. Permit terms were very similar to those being proposed for adoption.
- As other fisheries have been closed to new entry or closed for conservation reasons, interest in options such as deepwater crabs has grown.
- Each permit request must currently be separately answered and the general lack of information on permit conditions often frustrates applicants.

# **DEPARTMENT COMMENTS:**

• Clear regulations in the Tanner crab section detailing the conditions and restrictions likely to be attached to permit for commercial harvest of deepwater crabs would facilitate processing applications for permits. Therefore, the department supports this proposal.